

ULS Database Public Access Files

The Universal Licensing System (ULS) public access files are available for download. These files contain application data or license data, and anyone can download them directly to their own computer. Data is downloaded as a zipped file. Any of the popular "zip" utilities can be used to unzip the file. Unzipping a downloaded file causes a number of data files to be stored on your computer. Each zipped file contains a set of data files named *xx.dat* where *xx* are 2 unique characters to indicate the content of the specific data file.

Zipped Files. The zipped file contains either complete application data or license data for a specific radio service, and contains all the licenses or applications that exist for that radio service or daily application data or license data that contains only the previous day's transactions; i.e., those applications or licenses that were brand new or modified "yesterday." The name of each downloaded file identifies its content. The naming convention for complete files is *c_sssss.zip* where *c* indicates the content ("L" for licenses or "A" for applications), *sssss* indicates the service (such as "aircr" for aircraft). For example *a_amat.zip* contains a file having all application data for the Amateur radio service. The naming convention for daily files is *c_ss_ddd.zip* where *c* indicates the content ("L" for licenses or "A" for applications), *ss* indicates the service (such as "am" for amateur) and *ddd* is the day of the week. For example, *l_am_wed.zip* contains new or changed amateur licenses from Wednesday.

The ULS zipped public access files can be reached by going to the "Downloads" section of the ULS home page. Under the "Downloads" section are two hyperlinks – "Databases" and "Daily Transaction Files". Click on either link as appropriate. The complete files are created early Sunday morning and the daily files are created early Tuesday through Saturday mornings. The file created on Tuesday contains Monday data; Wednesday contains Tuesday data and so on.

NOTE: A file size of 160 bytes indicates that there were no new or modified applications or licenses for that radio service for that day.

Data Files. The *dat* files produced by unzipping a downloaded file will vary depending on which radio service data you selected and whether you are downloading applications or licenses. Each data file contains a specific type of data (e.g., names and addresses, location data) and the data is pipe-separated. Each record type starts with the same unique 2-character record type code that identifies the table from which the data was extracted. The last data field is not followed by a "|".

Each data file has a name of the form *xx.DAT*, where *xx* indicates which table the data came from. In fact, each data file has the same name as its corresponding table; for example, file *FR.dat* contains the data from table *PUBACC_FR*. Look for the *FR* tab in the excel spreadsheet that is available on the Public Access web page.

Definition Files. Three files containing definitions are available for downloading:

- pa_ddefnn.xls is an Excel file containing definitions of the data fields in the database tables where *nn* is a number that increases as the file is updated.
- pa_ddefnn.sql contains the SQL for the table definitions where *nn* is a number that increases as the file is updated.
- pa_codesn.doc contains meanings of codes for the code data elements in the tables where *n* is a number that increases as the file is updated.

Available Services

Public access files are created for all of the radio services that are contained in ULS. As additional services are added to ULS, public access files will be made available for those as well. The file pa_ddefnn.sql has all the SQL table definitions for Amateur, Aircraft, GMRS, FRC, Ship, Paging, Cellular, Coast & Ground, Land Mobile, MDS/ITFS, Microwave and Market-based applications and licenses. In addition, since transfers of control or assignments can cross multiple radio services, a separate file is created which contains these applications. Once these applications are consummated, each of the licenses will be updated appropriately. The next day, those licenses will be contained in the appropriate service's daily zip file.

Data Files

Each data file has the same name as the table the data was extracted from; for example, hd.dat contains the data from table PUBACC_HD. Following are tables that summarize the available data tables associated with the following services:

- Table 1 summarizes the tables for the Aircraft, GMRS, Amateur, Ship and FRC services that are filed for using FCC Form 605.
- Table 2 summarizes the tables for the Market-based, Paging, Cellular, Coast & Ground, Land Mobile, Microwave and MDS/ITFS services.

Paging, Cellular, Coast & Ground, Land Mobile, Microwave and MDS/ITFS services are referred to as site-based to distinguish them from market-based services. Applications related to these services are filed using FCC Form 601.

- Table 3 summarizes the tables for Assignments and Transfers and Spectrum Leasing, FCC Form 603.

Note that these tables show the hierarchy of the data tables for each service, and which data tables are required (R) or optional (O) for the applications and licenses within a service.

Table 1. Public Access Tables for the Aircraft, GMRS, Amateur, Ship and FRC Services

Tables	Table Contents	Aircraft		GMRS		Amateur		Ship		FRC	
Hierarchy		App	Lic	App	Lic	App	Lic	App	Lic	App	Lic
HD	Main Form 605 data that carries over to the license	R	R	R	R	R	R	R	R	R	R
AD	Main Form 605 data that does not carry over to the license	R		R		R		R		R	
RE	Application return or dismissal reasons	O		O		O		O		O	
EN	Names and addresses	R	R	R	R	R	R	R	R	R	R
IA	International Addresses									O	O
CO	FCC Comments	O	O	O	O	O	O	O	O	O	O
HS	Application/License History	R	R	R	R	R	R	R	R	R	R
SC	License Level Canned Special Conditions		O		O		O		O		O
SF	License Level Free Form Special Conditions		O		O		O		O		O
AC	Aircraft data	R	R								
AM	Amateur data					R	R				
VC	Requested vanity call sign					O					
SH	Ship data							R	R		
SE	Ship Exemption							O	O		
SV	Ship Voyage							O	O		
FA	FRC data									R	R
AT	Attachment information	O		O		O		O		O	
LA	License Attachment information		O		O		O		O		O

Table 2. Public Access Tables for the Market-based and Site-based Services

Tables	Table Contents	Market-based		Paging		Cellular		Micro wave		Land Mobile		Coast & Ground		MDS/ ITFS	
Hierarchy		App	Lic	App	Lic	App	Lic	App	Lic	App	Lic	App	Lic	App	Lic
HD	Main Form 601 data that carries over to license	R	R	R	R	R	R	R	R	R	R	R	R	R	R
AD	Main Form 601 data that does not carry over to license	R		R		R		R		R		R		R	
A2	Additional Application data that does not carry over to the license							R						R	
RE	Application return or dismissal reasons	O		O		O		O		O		O		O	
EN	Names and addresses	R	R	R	R	R	R	R	R	R	R	R	R	R	R
CO	FCC Comments	O	O	O	O	O	O	O	O	O	O	O	O	O	O
HS	Application and License history	R	R	R	R	R	R	R	R	R	R	R	R	R	R
IR	IRAC status						O	O	O		O		O		O

Tables	Table Contents	Market-based		Paging		Cellular		Micro wave		Land Mobile		Coast & Ground		MDS/ ITFS	
Hierarchy		App	Lic	App	Lic	App	Lic	App	Lic	App	Lic	App	Lic	App	Lic
CS	COSER status						O	O	O		O		O		O
LM	Land Mobile administrative data									O	R				
MW	Microwave administrative data							O	R						
MI	MDS/ITFS administrative data													O	R
CG	Coast & Ground administrative data											O	R		
BC	Broadcast Call Signs							O	O	O	O			O	O
AS	Associated Call Signs									O	O			O	O
FC	Frequency Coordination							O		O		O			
SC	License Level Canned Special Conditions		O		O		O	O	O		O		O		O
SF	License Level Free Form Special Conditions		O		O		O	O	O		O		O		O
BO	License build out data		R				R								
UA	Unservd Area					O	O								
CP	Control point data			O	O	O	O	O	O	O	O	O	O	O	O
SI	SID number					O	O								
MK	Market data	R	R			O	O								
TL	Tribal Lands data	O	O												
MP	P&D market data	O	O												
MF	Disaggregated frequency data	O	O												
MC	Partition coordinates	O	O												
LO	Location data	O	O	O	R	O	R	O	R	O	R	O	R	O	R
L2	Additional Location data							O	O	O	O			O	O
OP	Area of operation text									O	O	O	O	O	O
LS	Location Level Canned Special Conditions				O		O	O	O		O		O		O
LF	Location Level Free Form Special Conditions				O		O	O	O		O		O		O
BL	Location build out data						R								
AN	Antenna data			O	R	O	R	O	R	O	R	O	R	O	R
RC	Receiver data							O	O						
RZ	Receive Zone data													O	O
FR	Frequency data		R	O	R	O	R	O	R	O	R	O	R	O	R
F2	Additional frequency data							O	O					O	R
FT	Frequency Type													O	O
FS	Frequency Level Canned Special Conditions				O		O	O	O		O		O		O
FF	Frequency Level Free Form Special Conditions				O		O	O	O		O		O		O
BF	Frequency build out data				R				R		R		R		R
RA	Radial data			O	O	O	R								
EM	Emission data			O	O	O	O	O	R	O	R	O	R	O	R
PC	Points of Com data					O	O								

Tables	Table Contents	Market-based		Paging		Cellular		Micro wave		Land Mobile		Coast & Ground		MDS/ ITFS	
Hierarchy		App	Lic	App	Lic	App	Lic	App	Lic	App	Lic	App	Lic	App	Lic
PA	Paths							O	R						
SG	Segments							O	R						
AT	Attachment information	O		O		O		O		O		O		O	
LA	License Attachment Info		O		O		O		O		O		O		O

Table 3. Public Access Tables for Assignment and Transfer and Spectrum Lease Applications

Tables	Table Contents	AA/TC	LL
Hierarchy		App	App
HD	Main Form 603 data that carries over to the license	R	R
AD	Main Form 603 data that does not carry over to license	R	R
A2	Additional Application Detail		O
RE	Application return or dismissal reasons	O	O
CF	Multiple call signs or file numbers affected by this application	O	O
EN	Names and addresses for licensees, contacts, transferees, assignees, transferors, assignors, owners	R	R
CO	FCC comments	O	O
HS	Application and License history	R	R
TA	Transfer/Assignment data	R	
MK	Market data	O	
MP	Partition market data	O	
MF	Disaggregated frequency data	O	
MC	Partition coordinates	O	
AT	Attachment information	O	O

Since data can differ from service to service, you will find that particular columns in certain tables will always be null for some services but contain data for other services.

Using the Data

Data can be joined whenever the column name is the same in both tables. The primary column for joining license data is the call sign. The primary column for joining application data is ULS file number. In addition to the call sign or ULS file number, each application and license has been assigned a unique, 9-digit system identifier. This system identifier is useful in cases where a call sign has been reassigned, insofar as it allows you to differentiate between the active call sign and the call sign that has expired or been cancelled or terminated. (This situation occurs commonly with Amateur vanity licenses.)

License data for site-based services can be joined by the following combination of columns:

- call_sign
- call_sign and location_number
- call_sign, location_number and antenna_number
- call_sign, location_number, antenna_number and frequency_number
- call_sign, path number, location_number and antenna_number
- call_sign, path_number and segment_number

License data for market-based services can be joined by the following combination of columns:

- call_sign and market code
- call_sign, market_code and market_partition_code
- call_sign, market_code, market_partition_code and undefined_partitioned_area
- call_sign, market_code, market_partition_code and defined_partition_code

The unique system identifier can be used in place of the call_sign or in conjunction with it.

Application data can be joined using the columns above with uls_file_number replacing call_sign. The unique system identifier can be used in place of the uls_file_number or in conjunction with it.